

# Laminate Flooring Test Results - Health Issues and Solutions

The U.S. Consumer Product Safety Commission (CPSC) tested formaldehyde levels released from specific types of laminate flooring made in China between 2012 and 2014 and sold at Lumber Liquidators® stores in the United States. CPSC tested the same type of flooring that had some of the highest formaldehyde levels in tests conducted during a recent consumer investigation.

The Centers for Disease Control and Prevention (CDC) and the Agency for Toxic Substances and Disease Registry (ATSDR) evaluated possible health effects from formaldehyde released into indoor air from this laminate flooring.

**CDC/ATSDR found that exposure to formaldehyde in the CPSC-tested laminate flooring sold at Lumber Liquidators® could cause irritation and breathing problems. However, you can take steps to reduce formaldehyde levels in your home.**

Irritation and breathing problems can happen in anyone, but children, older adults, and people with asthma or other breathing problems are more likely to have these symptoms.

If your home already has elevated levels of formaldehyde from other products (like cabinets, furniture, or curtains) **and** you have this type of flooring in your home, the formaldehyde levels could affect everyone in the home.

Breathing in very high levels of formaldehyde over many years has been linked to rare nose and throat cancers in workers. Formaldehyde exposure from the tested laminate flooring would be **much lower** and would last for **less time** than the exposures linked to cancer. We estimated the risk of cancer from exposure to this flooring and it's low.

Exposure to formaldehyde in the tested laminate flooring can irritate

- Eyes
- Nose
- Throat

It can also increase breathing problems for people with health conditions like

- Asthma
- Chronic obstructive pulmonary disorder (COPD)



**Read on to learn how to reduce exposure to formaldehyde in your home.**

## The laminate flooring in my home was made in China between 2012 and 2014 and purchased at Lumber Liquidators®. What should I do?

Formaldehyde levels in your home should return to typical levels within 2 years after the flooring was installed. If you have concerns about formaldehyde in your home, you can lower the amount by taking the following steps.

### Reduce formaldehyde already in the home.

- Open windows for a few minutes every few days to let in fresh air — unless you have asthma triggered by outdoor air pollution or pollen or you're concerned about safety.
- Install and use exhaust fans as much as possible.
- Keep the temperature and humidity inside your home at the lowest comfortable setting.
- Make your home smoke free. Tobacco smoke contains formaldehyde, so don't allow anyone to smoke in your home.

### Choose home products with low or no formaldehyde for future purchases. Look for

- Furniture, wood cabinetry, or flooring made without urea-formaldehyde (UF) glues
- Pressed-wood products that meet ultra-low emitting formaldehyde (ULEF) or no added formaldehyde (NAF) requirements
- Products labeled "No VOC/Low VOC" (volatile organic compound)
- Insulation that does not have UF foam

### Reduce formaldehyde from new products.

- Wash permanent-press clothing and curtains before using them.
- Let new products release formaldehyde outside of your living space before you install or use them inside, for example in a garage or on a patio. If possible, keep them out of your living space until you can no longer smell a chemical odor.

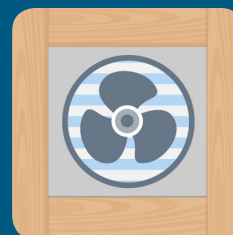
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**Note:** Air filters generally don't help lower levels of formaldehyde in your home. Overheating your home to "bake" out the formaldehyde also doesn't work and may even raise formaldehyde levels.

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Open windows



Use exhaust fans



Control temperature



Smoke-free home



Wash new items



Air-out new products

### What if I have symptoms?

- First, follow the steps to lower the levels of formaldehyde in your home.
- If you still have symptoms **only** when you're at home, see your doctor to find out what is causing those symptoms. Symptoms include breathing problems, or irritation of the eyes, nose, or throat.



### If I have this type of flooring in my home, should I get my home tested for formaldehyde?

You don't need to consider getting your home tested unless

- You can still smell strong chemical odors  
OR
- You have symptoms like breathing problems and irritation **only** when you're in your home.

If you want to test your home, hire a qualified professional who has the training and equipment to test formaldehyde levels in your home. Note that these tests can be expensive and don't tell you which products are releasing the most formaldehyde in your home.

There are some tests you can do yourself, but results from these home-testing kits can be different based on where you take the air samples and how long you do the testing. You might not be able to compare home testing results to the results of tests done by qualified professionals.

When the results come in, you can talk with the professional about what to do next. Keep in mind that there are no standards for acceptable levels of formaldehyde in your home.

### Should I remove the laminate flooring in my home?

That depends.

- **If the flooring was installed more than 2 years ago**, the levels of formaldehyde have most likely gone back to what's usually found in homes — so there's probably no reason to remove it.
- **If the flooring has been in your home for less than 2 years and you're having symptoms of formaldehyde exposure that go away when you leave your house**, professional air testing may be a good idea. When the results come in, you can talk with the professional about what to do next.

Note that removing flooring, in particular, new laminate flooring, may increase formaldehyde release. Consult a professional before taking any action to remove the flooring.

## Where can I get more information?

- You can contact CDC/ATSDR for updated information at 1-800-CDC-INFO.
- If you have questions or concerns about the products used in your home, contact the Consumer Product Safety Commission at 1-800-638-2772.
- For information from the Pediatric Environmental Health Specialty Units (PEHSU) on Children's Potential Exposures to Formaldehyde from Building Furnishings, visit

Guidance for Parents and Families

[http://www.pehsu.net/Public\\_Formaldehyde\\_Exposures.html](http://www.pehsu.net/Public_Formaldehyde_Exposures.html)

Guidance for Health Professionals

[http://www.pehsu.net/HealthProf\\_Formaldehyde\\_Exposures.html](http://www.pehsu.net/HealthProf_Formaldehyde_Exposures.html)

- For more details on the laminate flooring testing report, visit <http://www.cdc.gov/nceh/laminateflooring/default.html>
  - For more information on sources of formaldehyde, visit [www.cdc.gov/nceh/formaldehyde](http://www.cdc.gov/nceh/formaldehyde)
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